

Amendments to the Claims

Applicants submit herewith a marked-up version of the claims.
No changes have been made to the claims.

Applicants' Response

Applicants' application stand rejected under 35 U.S.C. § 102 and § 103 based on the Examiner response of August 8, 2008. Applicants address the rejections of the Examiner below.

Claim Rejections – 35 USC § 102

Claim 20 was rejected under 35 U.S.C. 102(e) as being anticipated by Taheri et al. (US Patent 6,690,970 – herein Taheri et al.) Taheri was cited for disclosing repair of the heart myocardium of a patient, the method comprising:

- (a) providing an implantable system comprising:
 - (i) a cell repopulation source comprising genetic material, stem cells, or a combination thereof, capable of forming new contractile tissue in and/or near an infarct zone of a patient's myocardium (**referencing col.3, lines 2-7**); and
 - (ii) an electrical stimulation device for electrically stimulating the new contractile tissue in and/or near the infarct zone of the patient's myocardium (**referencing col. 5, lines 46-52**);
- (b) implanting the cell repopulation source into and/or near the infarct zone of the myocardium of a patient (**referencing col. 5; line 66 to col.6, line 7**)
- (c) allowing sufficient time for new contractile tissue to form from the cell repopulation source (**referencing col. 5, lines 35-30**); and
- (d) electrically stimulating the new contractile tissue (**referencing col. 5, lines 46-52**).

35 U.S.C. **102(e)** allows the use of certain international application publications and U.S. patent application publications, and certain U.S. patents as prior art under 35 U.S.C. **102(e)** as of their respective U.S. filing dates, including certain international filing dates. However, the current reference cited, US 6,690,970 has a US filing date of October 6, 2000. The instant application, US

Appl. No. 10/824,011, was filed 4/14/2004 but claims two earlier application priority dates then the cited reference US 6,690,970:

- 1) US 10/824,011, was filed 04/14/2004, claims priority to US 09/654,185;
- 2) US 09/654,185, was filed 09/01/2000, claims priority to US 09/145,743
- 3) US 09/145,743, was filed **09/02/1998**, claims priority to US 60/064,703
- 4) US 60/064,703 was filed **11/07/1998**.

Given the present application dates predate the cited reference the rejection of the present application of the US 6,690,970 under 102(e) is improper, and therefore applicants respectively request the present rejection removed.

Claim Rejections – 35 USC § 103(a)

Claims 21-22 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taheri et al. (US Patent 6,690,970) in view of Michal et al. (US Patent 7,294,334).

Claims 21 and 22 were specifically rejected over Taheri. Taheri was cited for disclosing an electrical stimulation device (see pacemaker; col. 5, lines 46-52). The Examiner indicated that Taheri did not go into the specifics of the stimulation device. Michal was cited for disclosing a similar system where the stimulation device comprises a muscle stimulator and electrodes; wherein the electrodes are implanted into and/or near the infarct zone of the myocardium (see col. 10, lines 19-44). Therefore, the Examiner concludes it would have been obvious to one of ordinary skill in the art at the time of the invention to set up the electrical stimulation device in such a manner because Michal teaches that doing so unloads the infarct region from mechanical stress (see col. 10, lines 32-39). The Examiner considers that any pacemaker would be in the form of a capsule since a capsule is merely a small case or covering (see Random House Unabridged Dictionary, Random House, Inc. 2006).

Claim 24, modified Taheri discloses the muscle stimulator and cell repopulation source are delivered to the infarct zone through a catheter (see col. 5, lines 55-59).

Claim 25, Taheri discloses the undifferentiated contractile cells comprise autologous cells (see col. 3, lines 4-5).

Claim 23 was rejected under 35 U.S.C. 103(a) as being unpatentable over Taheri et al. (US Patent 6,690,970) and Michal et al. (US Patent 7,294,334) in view of Padua et al. (US PGPub. 2003/0204206). The Examiner notes that regarding Claim 23, neither Taheri nor Michal discloses combining the stimulator with the delivery of the cell repopulation source. Padua teaches a similar system where the muscle stimulator is a carrier for the cell repopulation source (see par. 10). The Examiner concludes it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the two in order to avoid stimulating the wrong location and to prevent multiple insertions.

A **35 U.S.C. 103** rejection is based on **35 U.S.C. 102(a)**, 102(b), 102(e), etc. depending on the type of prior art reference used and its publication or issue date. As previously established the present application has a priority dates of

3) US 09/145,743, was filed **9/02/1998**, claims priority to US 60/064,703

4) US 60/064,703 was filed **11/07/1998**.

Applicants' review of the cited references indicated that none of the references cited under USC § 103 or made of record predate the priority date of the present application:

The earliest priority date for Taheri et al. was October 6, 2000;

The earliest priority date for Michal et al. was April 15, 2003;

The earliest priority date for Padua et al was August 20, 2001

The earliest priority date for Lee was May 8, 2002; and


The earliest priority date for Girouard et al. was December 29, 2005.

Applicants indicate that all dates set forth as references against the current application have **latter** effective filing dates than the present application. As such the rejection under 35 USC §103 is improper and applicants respectfully request the present rejection removed.

Conclusion

Applicants believe they have rebutted all outstanding rejections cited against the present application, and respectively indicate the application is now in condition for allowance.

Respectfully submitted,



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